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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,587	03/29/2004	Osamu Nakamura	042234	9493

38834 7590 10/24/2006

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EXAMINER
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NAKARANI, DHIRAJLAL S

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/810,587

Applicant(s)

NAKAMURA ET AL.

Examiner

D. S. Nakarani

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,7 and 10-15 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,7,10 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Applicant's election of Group I, claims 1-11 and species of claim 5, in the reply filed on August 10, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 4 and 12-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on August 10, 2006.
3. The disclosure is objected to because of the following informalities: Page 13, lines 10-12, the phrase "(meth)acrylic acid polymer (b2) include (meth)acrylic acid, (meth)acrylic ethyl ester or butyl ester, a copolymer with (meth)acrylic amide, and alkali metal salts or ammonium salts (meth)acrylic acid" is unclear in respect to type of polymers.  
  
Appropriate correction is required.
4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 5, 7, 10 and 11 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for gas barrier layer (B) comprising 95 to 10 wt% of an ethylene-vinyl alcohol copolymer (EVOH) (b1) having (1) an ethylene content of 1 to 19 mol%, (2) polymerization degree in the range of 100 to 2500 and (3) saponification degree within range of 85% to 99.9% (page 12, line 25 to page 13, line 6) and 5 to 90 wt% of (meth)acrylic acid polymer (PAA) (b2) having neutralization degree within the range of 3 to 15% and a polymerization degree within the range of 30 to 3000 (See page 13, lines 13-19), does not reasonably provide enablement for a gas barrier layer (B) comprising 95 to 10 wt% of an ethylene-vinyl alcohol copolymer (b1) having an ethylene content of 1 to 19 mol% and 5 to 90 wt% of (meth)acrylic acid polymer (b2) having neutralization degree within the range of 3 to 15%. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The invention as claimed reads on EVOH having polymerization degree and saponification degree out side above mentioned ranges which would result in barrier layer having either unsatisfactory gas barrier property or to cause obstacle in coating due to high viscosity. Likewise invention as claimed reads on PAA having polymerization degree out side above mentioned range which would result in barrier

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layer having identical problem as stated for EVOH. Therefore claimed barrier layer is broader in scope than disclosed in the instant specification.

7. Claims 1, 5, 7 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 11, the phrase "3-15% of the (meth)acrylic acid polymer (b2) has been neutralized partially" renders claims indefinite. It is not clear from the claim language whether 3-15% neutralization refers to weight percent of acid groups or mol percent of acid groups in the (meth)acrylic acid polymer (b2) or 3-15% refers to weight percent or volume percent of the (meth)acrylic acid polymer (b2). Clarification and/or correction requested.

Line 13, the phrase "(meth)acrylic ethyl and butyl ester" renders claims indefinite. It is not clear from the claim language whether applicants are trying to claim copolymer of (meth)acrylic acid and (meth)acrylic ethyl ester or (meth)acrylic butyl ester or something else? Since (meth)acrylic ethyl and butyl esters are not polymer. Therefore it is not clear what is meant by "(meth)acrylic ethyl and butyl ester"?

Lines 13-14, the phrase "copolymer with (meth)acrylic amide" cannot be understood since other monomer is not specified.

Line 15, the markush group member "alkali metal and ammonium salts" renders claims indefinite. Alkali metal and ammonium salts of what? Clarification and/or correction requested.

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Claim 10, lines 2-3, the phrase "the biaxially stretched polypropylene film" lacks clear antecedent basis. No biaxially stretched polypropylene film has been previously recited in claim 1 from which this claim depends. Therefore limitation cannot be understood.

8. Applicant's arguments with respect to claims 1-3 and 5-11 have been considered but are moot in view of the new ground(s) of rejection.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. S. NAKARANI whose telephone number is (571) 272-1512. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CAROL CHANEY can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**D. S. Nakarani**  
**Primary Examiner**  
**Art Unit 1773**

DSN  
October 6, 2006.